







BME's vision is to remain customer-focused and uphold a standard of operational excellence, growing the business internationally through an efficient and safety-driven global strategy, as well as to deliver real, quantifiable value through the application of best-inclass technology, products, and services that ensure a consistent user experience and improved product performance.





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BME is a leading manufacturer and supplier of explosives, as well as related accessories, equipment, and blasting services to the mining, quarrying, and construction industries. BME is a member of the Omnia Group, a JSE-listed diversified provider of specialised chemical products and services used in the mining, agriculture, and chemical sector. The Group consists of an Agriculture division (Omnia Fertilizer), a Chemicals division (Protea Chemicals), and a Mining division (BME and Protea Mining Chemicals). The Omnia Group has been in operation for more than 60 years.

Today, BME has operations across 20 African countries, as well as Australia, South-East Asia, and South America. Its ever-expanding global footprint includes operating licenses secured for the United States and Canada – an important expansion into the North American market.

# BLASTING

part from world-class bulk and packaged explosives products as well as basic to high-tech tailor-made service packages, BME is all about innovation – using technology to ensure that every blast brings value to our customers.

The in-house development of our AXXIS™ range of electronic detonators has opened new market opportunities for the company and is building BME's reputation as a global innovation market leader.

Building on this success, BME has evolved AXXIS™ even further into a centralised blasting system (CBS). Adapted for underground applications to enable underground panels to be detonated simultaneously from a remote point, the enhanced AXXIS™ CBS allows for the real-time communication of operational data to the surface.

Our new range of emulsion delivery equipment is bringing the benefits of emulsion to underground operations. We are able to deliver our highly stable and repumpable emulsion formulations into narrow reef, lateral, and uphole environments, using a variety of fit-for-purpose equipment and formulations.

At BME, we strive toward constant research and development to continuously improve and develop our products. Our innovation hub consists of various industry specialists in blasting science, chemical, mechanical, electrical, and software engineering, geosciences, and mathematics.

Our modular automation plants and remote emulsion manufacturing facilities offer the company and our clients security and continuity of supply. We are able to rapidly commission our bulk emulsion plants and related infrastructure on site, anywhere in the world.



For more information on BME, visit our website www.bmeexplosives.com or follow us on Linkedin for updates.

# SOME OF OUR OTHER INNOVATIONS INCLUDE:

#### **USED OIL**

Pioneering the application of used oil as an ingredient in our emulsion products. BME has incorporated used oil in our emulsions for over 30 years, ensuring cost efficiencies in the product and that harmful waste can be reused and disposed of in a responsible way.

## WORLD RECORD BREAKING ELECTRONIC DETONATOR BLASTS.

Our AXXIS™ electronic detonators continue to exceed customer expectations. The benefits of large blasts can be achieved using the AXXIS™ system and we continue to break records in the number of detonators fired in a single blast. A recent achievement for the system was the firing of a 6.690-detonator blast.

## DELIVERING EMULSION TO NEW DEPTHS

Expanding our underground range of pump technology to deliver emulsion to even the toughest narrow reef environments. BME has installed a vertical emulsion pipeline of 318 meters to deliver emulsion from surface to underground. This is the first time that emulsions have been pumped to this depth, and proves to be a revolutionary concept for underground mining efficiency. We continue to work on projects that will see emulsion being delivered through vertical pipelines to greater depths.

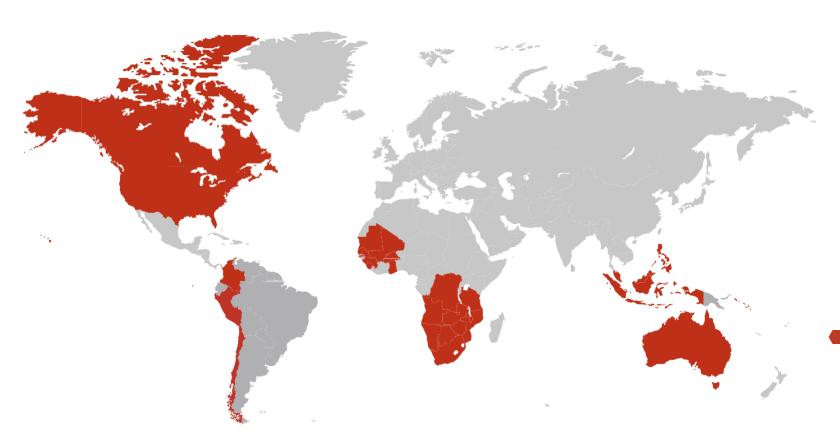
## DIGITAL COMMUNICATION TECHNOLOGIES FOR THE BLASTING ENVIRONMENT.

The real-time transfer of data and images between the workplace and management level can facilitate quicker and better decision making on underground and surface operations through real-time visibility. Using modern technology such as tablets and smartphones, data captured from mine blasts can be stored in a central location and analysed holistically to ensure higher efficiencies and productivity in operations.

FOR EXPLOSIVES, THINK BME.

BME CORPORATE PROFILE

## BME HAS A FOOTPRINT IN



### Africa

- · South Africa
- Lesotho
- Swaziland
- Botswana
- Zimbabwe
- Namibia
- Zambia
- Mozambique
- Malawi
- Tanzania
- DRC
- Rwanda
- Ghana
- Burkina Faso
- Sierra Leone
- Guinea
- Senegal
- Mauritania
- Mali

### Outside of Africa

- Singapore
- Indonesia
- Australia
- USA
- Canada (JV)
- Colombia
- Peru
- Chile
- Mexico

# PRODUCTS FOR BLASTING

BME was the first explosives company to introduce cold emulsions into South African opencast mines, and is today the market leader in emulsions and explosives in Africa.

# BME SUPPLIES AND MANUFACTURES AFULL RANGE OF PRODUCTS, INCLUDING:



- Bulk emulsions
- 2. Packaged explosives
- 3. Initiating systems
- Electronic detonators (AXXIS™)
- Software for computers, tablets and smartphones
- 6. On-site bulk emulsion plants



## **EMULSION EXPLOSIVES DELIVERY**

BME has a variety of manufactured equipment for surface and underground operations and is committed to R&D to find better and more cost-effective blasting solutions.

### SURFACE EQUIPMENT

To deliver our products efficiently and cost-effectively in the opencast environment, we have developed a range of fit-for-purpose equipment.

- Mobile manufacturing units (MMUs) BME assembles a range of emulsion and heavy ANFO MMUs which cater for all surface mining and guarrying applications.
- Stemming trucks BME provides a stemming plant fitted on an Iveco 380 T42 WH 6x6 cab chassis, or chassis specified by the client. The stemming truck is capable of delivering 15-18 cubic meters of crush aggregate per load.
- Cruiser charging unit (CCU) BME's CCU is a compact charging system available for use with BME's emulsion formulations for surface and underground.

- **Bulk technical support vehicle** This vehicle is fitted on a 4.2 I 4x4 Toyota Land Cruiser and is fully equipped to provide technical and monitoring capabilities, to enable operations to optimise their blasting.
- Modularised emulsion plants BME's plants are designed to be mobile, robust, and user-friendly, making them ideally suited for the mining environment. BME provides a range of manufacturing capacities to suit customer demand as well as any other blast managementrelated infrastructure such as storage, containerised offices, and technical equipment.





### **UNDERGROUND EQUIPMENT**

To make emulsion systems available throughout all underground operations, BME has developed an in-house range of emulsion pump technology.

- Vertical emulsion pipeline Designed to improve logistical efficiencies in the transportation of explosives to underground operations, BME's emulsion pipeline delivers emulsion vertically from surface to underground storage tanks.
- **Underground filling stations** Designed to operate in conjunction with BME's Portable Charging Unit (the MiniCharger), these filling stations are permanently located near the entrance to operating sections.
- Emulsion charging units (ECUs) These can be fitted to a wide range of underground mine carriers and are ideal for large trackless operations, where extensive quantities of emulsion are required for each blast.
- MaxiCharger (rail-bound) The MaxiCharger is a compact charging system developed for use with BME's emulsions and is designed for track-bound development operations.

- MegaCharger HP1500 and LP1500 This purpose-built charging unit is designed for reduced capital outlay and is available in both low-profile and high-profile designs in mechanised underground mining operations.
- Uphole Charging Unit or MegaCharger Uphole BME's new range of Uphole Charging Units have been designed for underground massive mining operations, which use uphole blasting practices.
- MiniCharger portable charging unit (PCU) BME's PCU represents the forefront of pumpable emulsion technology available for use in narrow reef mining operations. The PCU is manufactured for rough underground conditions. but is light and compact enough to be carried into stopes by mine personnel.
- MaxiCharger BME's MaxiCharger has been designed for rapid reloading in large development and stoping faces. The high strength pump allows for longer hose lengths and can connect up to six emulsion bags at a time.

FOR EXPLOSIVES, THINK BME BME CORPORATE PROFILE

# SERVICES FOR OPTIMAL BLASTING

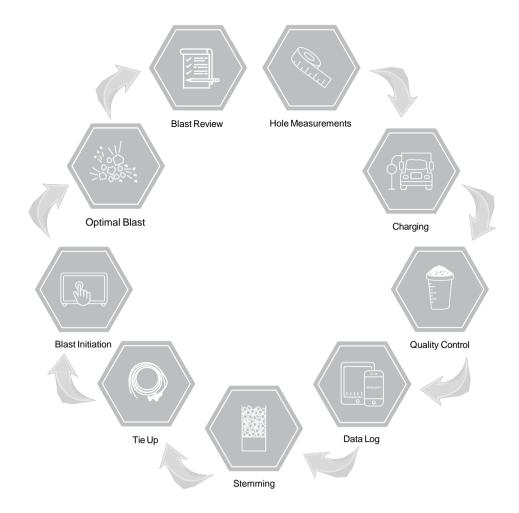
ME delivers a wide range of service packages that deliver real quantifiable value through optimal blasts by leveraging BME's knowledge base and best in class technology, products, and equipment. Additional customised services are available to meet unique customer requirements. Visit <a href="https://www.bmeexplosives.com">www.bmeexplosives.com</a> for more information.



# **DOWN**THE HOLE (DTH)

ME DTH service delivers INNOVEX™, our high-quality, reliable bulk emulsion explosives, to blast holes, using our mobile manufacturing units (MMU). We ensure fit-forpurpose products are pumped to achieve improved and consistent fragmentation.

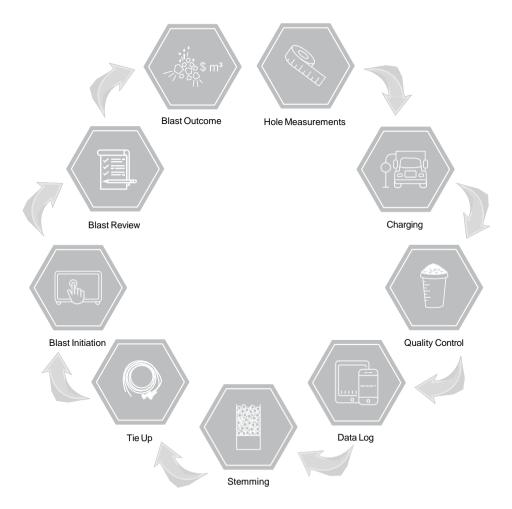
Clients can also make use of BME's extensive range of initiating systems and our market-leading AXXIS™ electronic detonation system. Blast quality can be further enhanced by using BME's BLASTMAP III™ software.



### PRIME, LOAD, TIE, AND SHOOT (PLTS)

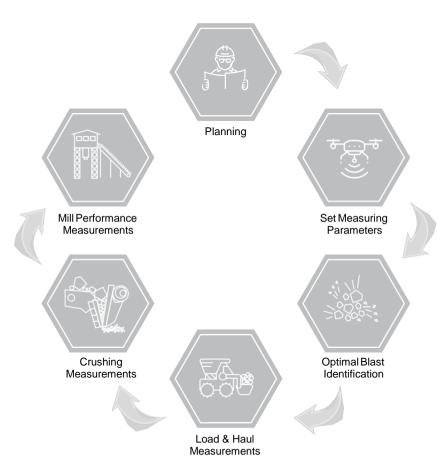
ME's PLTS service is designed for customers who require BME's team to perform a full blasting service. This service ensures that skilled resources are available to the customer to achieve the best blasting results. This service option is ideal for companies whose core business is not blast planning and execution. BME takes on the responsibility for the

full operation, safety, and management of the blast service.



### ROCK ON GROUND (ROG) SERVICE

n this comprehensive service to the client, BME takes full responsibility from blast design to analysing fragmented rock (excluding drilling), allowing the client to outsource this function with value being measured on fragmentation quality and volume of broken rock. We provide the materials, equipment and skilled staff required to deliver cost-effective and quality blasting, allowing the client to focus on their core business.



# MINE TO MILL OPTIMISATION

ME's exclusive M2M service offering delivers the full range of benefits across the mining value chain. Blast designs can be optimised to achieve required fragmentation, blast movement, and muckpile shape, delivering improved loading, crushing, and milling rates. M2M will reduce overall mining costs by ensuring that downstream productivity is increased. The customer can be assured that the professionals who design the blasts and those who apply the designs in the field will be competent and fully conversant with the project requirements.

Benefits include closer management of downstream costs and overall systems optimisation, offering a cradle-to-grave view of the entire mining process in consultation with mine and plant personnel.

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BME CORPORATE PROFILE

## SOLID FOUNDATION FOR PARTNERSHIPS

ME's vision is to remain customer focused and uphold a standard of operational excellence, growing the business internationally through an efficient and safety-driven global strategy. We also aim to deliver real, quantifiable value through the application of best-in-class technology, products, and services that ensure a consistent user experience and improved product performance.

BME's flexibility in mobile manufacturing facilities for emulsion products places it in a strong position to reach new markets and to add value to customers in any region. Our procurement strategy leverages both local and global sources, adding to the efficiency and security of the supply chain, allowing continuous strengthening of customer relationships.

## OTHER FOCUS AREAS FOR BMF INCLUDE:

#### **EMPOWERING**

Empowering and up-skilling the workforce to address the skills shortage in the mining industry.

#### **SAVE COSTS**

Identifying synergies, efficiencies, and opportunities to save costs with strategic partners and clients, especially as increasing costs place pressure on the sustainability of mines

#### SERVICE EXCELLENCE

Driving partnerships from the point of view of supply chain management, innovation, and service excellence.

### **SAFETY**

Continued focus on safety through enhanced management and improved safe operational processes.

#### **SOCIAL RESPONSIBILITY**

BME is committed to reducing its effect on the environment, from recycling used oil to minimising our carbon footprint by fitting technology to our plants to reduce greenhouse gases. We partner with communities, are part of responsible care and empower our employees.

### **TECHNOLOGY**

Leveraging the power of digital technology to drive operational and service excellence.

### **BUSINESS MODEL**

Continued improvement of the business model to ensure that customers always find it easy to do business with us.





BLAST PARTNER

upon a foundation of proven technology, high-quality service and ongoing research and development - allows better quality blasts every time and improves the efficiency and profitability of your entire operation.

